Jan. 17, 1950 A. L. C. MOSS ET AL 2,494,776

EXTENSIBLE CIGARETTE

Filed April 6, 1945 2 Sheets-Sheet 1

Fig. 1

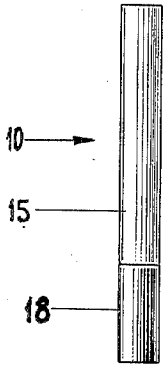


Fig. 2

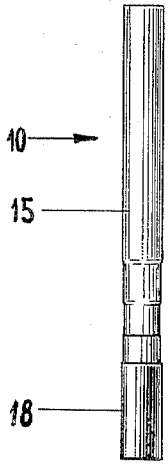
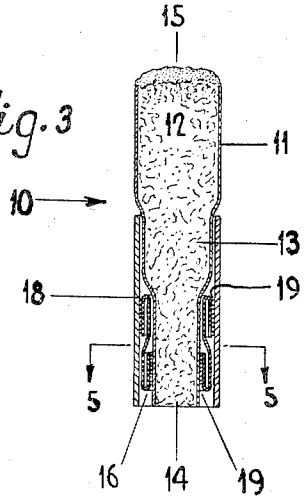


Fig. 3



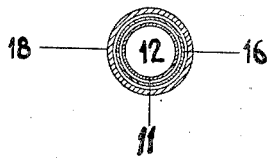
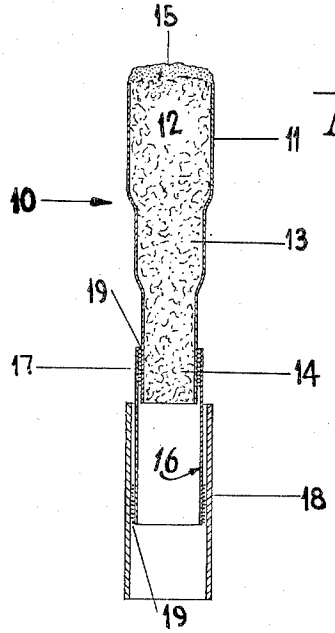


Fig. 5

Fig. 4



ARTHUR L.C. MOSS
ROBERT H. GOLDSMITH
INVENTORS

BY Joseph Blacker

ATTORNEY

Jan. 17, 1950 A. L. C. MOSS ET AL 2,494,776

EXTENSIBLE CIGARETTE

Filed April 6, 1945 2 Sheets-Sheet 2

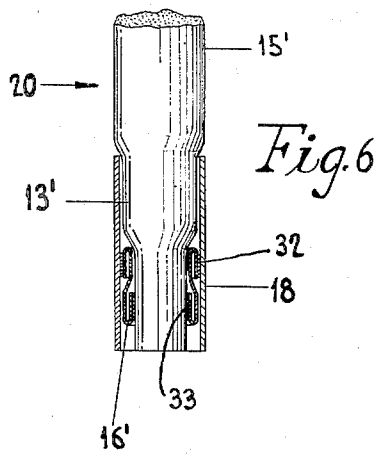


Fig. 6

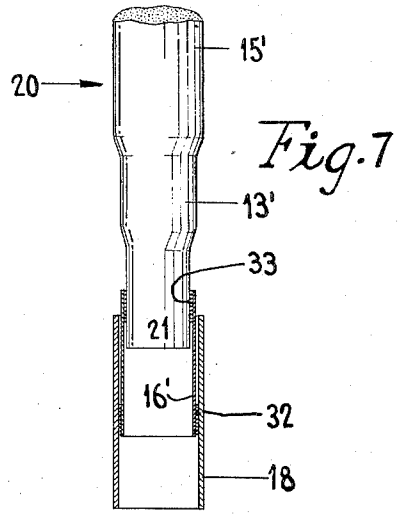


Fig. 7

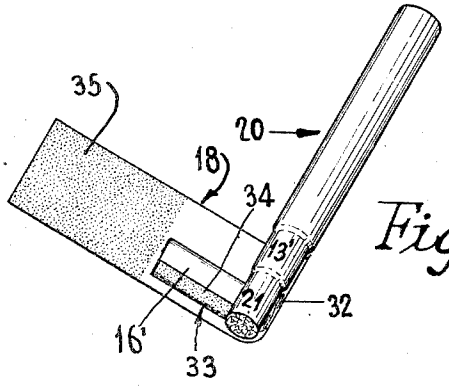


Fig. 8

ARTHUR L.C. MOSS
ROBERT H. GOLDSMITH
INVENTORS

BY Joseph Blacker

ATTORNEY

Patented Jan. 17, 1950 2,494,776

UNITED STATES PATENT OFFICE

2,494,776

EXTENSIBLE CIGARETTE

Arthur L. C. Moss and Robert H. Goldsmith,
New York, N. Y.

Application April 6, 1945, Serial No. 586,974

2 Claims. (Cl. 131—11)

1

This invention relates to cigarettes and more particularly to extensible and integral mouth-pieces for cigarettes.

An object of this invention is to provide means inseparably secured to a cigarette for increasing the effective smoking capacity of the cigarette.

Another object of this invention is to provide a cigarette having a foldable tubular outer member or adapter secured to the cigarette wrapper and having a rigid tubular member or mouth-piece secured to the adapter and thereby providing a cigarette having a telescopically extensible mouth-piece without any increase in the normal length of the cigarette when in unextended position.

In the art of manufacturing cigarettes it is desirable to provide each cigarette with a suitable mouth-piece, which must be of material not injurious to the mouth and lips, and afford a surface which will permit its easy retention.

Mouth-pieces must be inexpensive to permit their being thrown away when made integral with cigarettes which are sold at a low price. Short paper tubes form light and inexpensive mouth-pieces. The individual mouth-piece made in accordance with this invention is attached to the cigarette wrapper by an adapter member mounted over one end of the cigarette and attached thereto. The individual mouth-piece provides proper draft through the body of tobacco inclosed within the cigarette wrapper.

Encroachment upon the tobacco-carrying portion of the cigarette as to limit the charge of tobacco or to increase the length of the cigarette, and thus render a given size of cigarette deficient in its smoking capacity, is obviated by this invention.

The invention consists in mounting the tubular mouth-piece over the adapter member and then attaching the two members together on a width sufficient to form a bond between the two members. The mouth-piece imparts additional reinforcement to protect the paper wrapper against rupture while in use.

By the use of these normally unextended and integral mouth-pieces the advantage of the cheap manufacture of cigarettes in quantities is maintained. The objectionable increase in the length of cigarettes having the required charge of tobacco but having normally or permanently extended mouth-pieces is avoided, and a telescopically extensible mouth-piece is provided which is inexpensive and which insures the perfect draft of each cigarette.

With the above and other objects in view, the

2

invention will be hereinafter more particularly described, and the combination and arrangement of parts will be shown in the accompanying drawings and pointed out in the claims which form part of this specification.

Reference will now be had to the drawings, wherein like numerals of reference designate corresponding parts throughout the several views, in which:

Figure 1 is an exterior view of a cigarette having the extensible and integral tubular mouth-piece in unextended position of the mouth-piece.

Figure 2 is an exterior view of the cigarette with the tubular mouth-piece in extended position.

Figure 3 is a central cross-sectional view, on an enlarged scale, of a partly burnt cigarette with the mouth-piece in unextended position.

Figure 4 is a central cross-sectional view, on an enlarged scale, of a partly burnt cigarette with the mouth-piece in extended position.

Figure 5 is a cross-sectional view, the section being taken as on line 5—5 in Figure 3.

Figure 6 shows an exterior view of the body of a modified cigarette similar to that shown in Figure 3, the connecting member and the mouth-piece being shown in cross-section.

Figure 7 is an exterior view of the cigarette shown in Figure 6 with the tubular mouth-piece in extended position and with a portion of the mouthpiece in overlapping relation with an end portion of the cigarette.

Figure 8 is a perspective view showing a method of manufacture of the extensible cigarette.

In the illustrated embodiment of the invention, the numeral 10 indicates an extensible cigarette having a wrapper 11, preferably made of paper, and being filled with tobacco or the like 12.

As best shown in Figures 3 and 4, the cigarette body has reduced portions 13 and 14 of slightly smaller diameters than the main body 15. The wrapper 11 of the cigarette 10 has a tubular foldable connecting member or adapter 16 attached thereto in any suitable manner such as by glue 19. The adapter 16 is made of thin pliable paper or the like and folded back upon itself when the mouth-piece is in non-extended position. The adapter has one end portion 17 attached to the reduced end portion 14 of the cigarette. A mouth-piece 18 is attached to the other end portion of the adapter 16 by glue 19.

The diameter of the reduced portion 13 is made less than the diameter of the body portion of the cigarette 10 by an amount so as to permit the

mouth-piece to be of the same outer diameter as the cigarette body. The diameter of the reduced portion 14 is made less than the diameter of the reduced portion 13 to provide room for the foldable connecting member or adapter 16. The reduced portions 13 and 14 of the cigarette body thus permit the outer diameter of the mouth-piece 18 to be the same as the outer diameter of the main body of the cigarette 15.

The mouth-piece 18 is made of paper or like material and is stiffer than the paper wrapper 11. The mouth-piece is sufficiently rigid and non-collapsible and adapted to impart an element of reinforcement to the cigarette. The length of the mouth-piece is equal to the combined lengths of the reduced portions 13 and 14 of the cigarette 10.

In practice we intend to carry out our invention without increasing the diameter or the length of cigarettes above that of standard brand cigarettes and without interference with the present size of package or mode of packaging of standard brands of cigarettes.

In operation, when the cigarette is burnt down to about three-quarters of an inch from the mouthpiece, the user grips the mouthpiece and pulls the partially consumed cigarette and the mouthpiece in opposite directions and thereby extends the effective length of the remainder portion of the cigarette, that is, the mouthpiece provides a hollow extension forming an integral continuation of the cigarette. The extended mouthpiece enables the user to burn up the remainder portion of the tobacco in the partially consumed cigarette.

It is to be noted that in the unextended position of the cigarette, best shown in Figure 3, the foldable connecting member 16 is folded outwardly at its upper end and inwardly at its lower end.

During the movement of the mouthpiece 18 to the extended position shown in Figure 4 it will be noted that the upper portion of the pliable member 16 will pass over the lower portion of the member 16 by compressing the said lower portion. Also that the tobacco at the end portion 14 will be simultaneously compressed. This is obvious because of the well known ease of compressibility of tobacco in cigarettes.

It is to be noted that the tubular mouthpiece 18 may be made of material such as Cellophane, cork or straw. It is also to be noted that the mouthpiece forms an integral part of the cigarette and is to be thrown away when the cigarette is consumed. Under present smoking conditions, the unconsumed portion of a cigarette which is held in the mouth in smoking is thrown away and this results in waste of tobacco. This waste is obviated when following the disclosure herein. It is also to be noted that by "tubular mouthpiece" we mean to include mouthpieces of oval cross-section and other cross-sections not of circular cross-section.

As shown in Figure 6, there is provided a modified cigarette 20, similar to that shown in Figure 3, but having an adapter 16' of lesser length than the adapter 16 shown in Figures 3, 4, and 5.

Figure 7 shows the cigarette 20 with the mouthpiece 18 in extended position. It will be seen that in this extended position, an end portion or zone 21 of the body of the cigarette 20 remains within the mouthpiece 18. The importance of this partially nested arrangement is; first, to provide sealing area or overlap between the mouthpiece 18 and the cigarette 20 at zone 21, and second, to provide a greater element of rigidity of the assembled extensible cigarette in its extended position. This increase in rigidity serves to maintain the axial alinement of the mouthpiece 18 and the cigarette 20 in extended position to prevent play or looseness.

Figure 8 shows a method of fabricating the extensible cigarettes illustrated in Figures 1 to 7 inclusive. By way of example, the end portion 21 of the modified cigarette 20 shown in Figures 6 and 7 is placed upon a folded adapter 16' when the adapter is in strip form. A portion of the adapter strip is attached to the mouthpiece 18 when the mouthpiece is in strip form by gluing the outwardly folded edge portion 32 of the adapter 16' to the mouthpiece.

In the assembling operation of the modified extensible cigarette 20, the mouthpiece 18 and the adapter 16' are tightly rolled over the portions 13' and 21 of the cigarette 20. During this rolling operation the inwardly folded edge portion 33 of the adapter 16' is glued to the external surface of the cigarette wrapper along a glued surface 34. The mouthpiece strip 18 has glue on a portion of its surface 35. During the rolling operation the mouthpiece strip is rolled upon itself and glued along the surface 35 to form the tubular mouthpiece. The rolling operation may be performed with sufficient pressure to form the reduced portions indicated at portions 13' and 21.

It is to be noted that no portion of the mouthpiece 18 is glued to the cigarette body. It is also to be noted that the length of adapter 16' is accurately predetermined so that it covers the exact circumference of the end portion 21 of the cigarette.

In the extensible cigarette 20, the reduction in diameter of the end portions 13' and 21 are compensated by the thicknesses of the mouthpiece 18 and the adapter 16' with the result that the extensible cigarette is of uniform diameter throughout its length.

It is to be noted that the reduced end portions 13' and 21 may be made during the rolling operation and in no way affect the present method of manufacture of cigarettes. The glue on the glued surfaces 33 and 34 is preferably preapplied to the adapter and mouthpiece. The glued surfaces 33 and 34 may be dampened prior to the rolling operation to get proper adhesion. In the actual production of the extensible cigarettes herein described we found no difficulty in making the diameter of the cigarette-body and of the mouthpiece uniform throughout.

It is to be noted that in the drawings we have shown the main body portions 15, 15' as greatly enlarged with respect to the adjacent reduced portions 13, 13' in order to visualize the working of the extensible cigarette, and that, in practice, the differences in the diameters is only a few thousandths of an inch.

In accordance with the patent statutes we have described and illustrated the preferred embodiments of our invention, but it will be understood that various changes and modifications can be made therein without departing from the spirit of the invention as defined by the appended claims.

We claim:

1. In an extensible cigarette having a wrapper portion of main diameter and wrapper portions of reduced diameters, a tubular mouthpiece, and an elongated foldable tubular connecting member having an end portion adhesively secured at one end to said wrapper and an end portion adhe-

sively secured to said mouthpiece, said mouthpiece in unextended position surrounding said reduced portions of said cigarette, the length of said mouthpiece being equal to the combined lengths of said reduced portions, said mouthpiece in extended position providing means for supporting said cigarette with said wrapper substantially fully exposed and thereby augmenting the smoking capacity of said cigarette, said reduced diameter cigarette portions permitting said main diameter cigarette portion and said mouthpiece to be of the same diameter, whereby said cigarettes may be stored in boxes adapted for said main diameter portion of said cigarettes, and said connecting member in folded position lying wholly within the length of the smallest reduced diameter portion of said cigarette.

2. In an extensible cigarette having a wrapper portion of main diameter and two wrapper portions of reduced diameters, a tubular mouthpiece, and an elongated foldable tubular connecting member having an end portion adhesively secured at one end to said wrapper and an end portion adhesively secured to said mouthpiece, said mouthpiece in unextended position surrounding said reduced portions of said cigarette, the length of said mouthpiece being equal to the combined lengths of said reduced portions, one of said reduced portions providing accommodation for said mouthpiece, the other reduced portion providing accommodation for said connecting member and said mouthpiece, said mouthpiece in extended position providing means for supporting said cigarette with said wrapper substantially fully exposed and thereby augmenting the smoking capacity of said cigarette, said reduced diameter cigarette portions permitting said main diameter cigarette portion and said mouthpiece to be of the same diameter, whereby said cigarettes may be stored in boxes adapted for said main diameter portion of said cigarettes, and said connecting member in folded position lying wholly within the length of the smallest reduced diameter portion of said cigarette.

ARTHUR L. C. MOSS.
ROBERT H. GOLDSMITH.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
879,713	Young	Feb. 18, 1908
1,957,958	Hauser et al.	May 8, 1934
2,339,705	Klingel	Jan. 18, 1944

FOREIGN PATENTS

Number	Country	Date
301,484	Germany	Oct. 27, 1917